

Residential Rates OIR

Joint IOU Rates Market Research Initiative

CPUC Public Workshops, December 6, 2012
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Joint IOU Rates Market Research Initiative Overview

- The research study is focused on customer preferences for current and possible future residential rate designs:
 - PG&E, SCE and SDG&E jurisdictions
 - Other jurisdictions with different default rate structures
 - Other jurisdictions with significant participation in voluntary time-of-use rates
- Obtain input directly from customers to make an objective evaluation of alternative rate designs based on the customer-centric principle that residential rates should be:
 - Understandable
 - Stable
 - Provide choice



Joint IOU Rates Market Research Initiative Overview (continued)

- Screening will ensure representative participation of customers in the following groups:
 - Low-income / CARE
 - High and low usage
 - Climate zones
 - Demographics such as income and age



Joint IOU Rates Market Research Initiative Sampling Approach

Total Sample Size = 4,600

- Web-based panel survey:
 - General population in PG&E, SCE and SDG&E service territories (2,600):
 - To be completed in English: 1,950
 - To be completed in Spanish: 650
 - Other jurisdictions (1,000):
 - 200 per service territory (5)
 - Other sub-groups (800):
 - SmartRate (engaged with electricity rate): 200
 - Solar Customers: 400
 - Unexposed (not provided detailed explanation of rate options): 200
- Hard to Reach - those typically not on the internet or without a computer: 200 (~68 per IOU)
 - Considering two approaches:
 - Specialized online panel recruitment company which provides computer / internet access
 - Mailed survey



Joint IOU Customer Research Initiative

Research Objectives

Principle	Questions for Research to Address
Rates should be understandable	<ul style="list-style-type: none"> • Which rate structures and components are most understandable / least confusing when it comes to understanding bills? • Which rate options would work best with the customer lifestyles to enable them to modify their behavior and manage / lower their electricity bills?
Rates should be stable	<ul style="list-style-type: none"> • Which rate structures provide the most / least predictability? • Which rate structures provide the most bill stability? • What is customer tolerance for bill volatility?
Rates should provide customer choice	<ul style="list-style-type: none"> • What percentage of customers would subscribe to each rate option? • Which customers would subscribe to which rate option? • Which rate structures appeal most to different segments of customers while encouraging conservation, peak reduction and bringing rates closer to cost-basis? • Which product features (rate attributes) are most important?



Joint IOU Rates Market Research Initiative Proposed Methodology

Discrete Choice Conjoint

- Conjoint analysis is a commonly used approach in product development for evaluating the importance to customers of different product attributes.
 - Each respondent is presented with several sets of product alternatives and asked to choose from each set which alternative best meets their needs.
 - Guides participants in the exploration of their preferences / trade-offs between product features and variations in the features in a way that can be measured quantitatively.
 - Statistical analysis of the data can provide estimates of changes in consumer choices with different product features / levels
- Discrete Choice Conjoint is by far the most preferred conjoint approach because it models real-life choices and customer behavior.



Joint IOU Rates Market Research Initiative Proposed Methodology – Choice Exercise

- Discrete Choice Conjoint Example

Residential Electric Rate Plans:

Attributes



	Periods	Volumetric Charge (per kWh)	Customer Charge (per month)	Demand Charge (max kW per month)	Bill Protection
Option 1					
Option 2					
Option 3					

Levels



Illustrative Only



Joint IOU Rates Market Research Initiative Proposed Methodology – Choice Exercise

- Discrete Choice Conjoint Example

Residential Electric Rate Plans:

Attributes

	Periods	Volumetric Charge (per kWh)	Customer Charge (per month)	Demand Charge (max kW per month)	Bill Protection
Option 1	Daily Peak: 2-6 pm	Peak: 20¢ Off-Peak: 8¢	\$10	> 3 kW: \$10 < 3 kW: \$5	12 mo.
Option 2	Monthly Baseline: 800 kWh	Baseline: 14¢ Above BL: 17¢	\$15	\$2 per kW	None
Option 3	None	15¢	\$5	None	3 mo.

Levels

Illustrative Only

PG&E® Joint IOU Rates Market Research Initiative

Questionnaire Structure

I. Introduction

1. Screening
2. Evaluation of Utility company
3. Current Rate Knowledge

II. Introduction to Rate Options - Education

1. Rate Structures
 - a. Time-of-Use
 - b. Tiered
 - c. Flat
2. Rate Components
 - a. Time Periods
 - b. Customer Charge
 - c. Demand Charge
 - d. Tiers
 - d. Price-ratios
3. Initial Preferences

III. Choice Exercise

- Choice Task 10
- Choice Task 2
- Choice Task 1

IV. Relevance of principle that rates should be understandable, stable and provide choice.

1. Importance of principle to customers (understandable, stable, choice, etc.)
2. Evaluation of rate options using principle
3. Bill review habits
4. Demographic and Household characteristics





Joint IOU Rates Market Research Initiative

Hiner and Partners, Inc. - Qualifications

- ❑ Established in 1995 and located in Orange County CA.
- ❑ Team lead by Dr. Steve Westberg, Executive Vice President and Partner whose experience includes:
 - Manager of Market Research at Southern California Edison (pre-2001).
 - Senior Research Executive at Wirthlin Worldwide.
 - USC Adjunct Faculty Member teaching research methods and consumer psychology.
- ❑ Examples of conjoint analysis HINER has completed in recent years:
 - PetCo Store Brand Product Development, Kroger Insurance Products, GE Capital Automotive Repair, CareCredit Dental and Vet Pricing, Microsoft New Household Product (confidential), Kroger Gift Cards, EA Rock Band Video Game Bundling and Pricing, Rockwell Collins In-Flight Entertainment System Development, Jenny Craig Program Development, and others.
 - PG&E SmartAC Program Development, SCE Refrigerator Recycling Program Development, PG&E Whole House Program Design



Joint IOU Rates Market Research Initiative Timing / Coordination

- **Schedule**

- November: Initial Scoping
 - December: Collection of input on design from other parties
 - January: Data Collection (field survey)
 - February: Analysis and results
- Email will be sent to RROIR Service List today soliciting input on scheduling meeting times before the end of the year.

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